Name: ______________________________

GCSE (1 – 9)

The Cosine Rule

Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided

– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

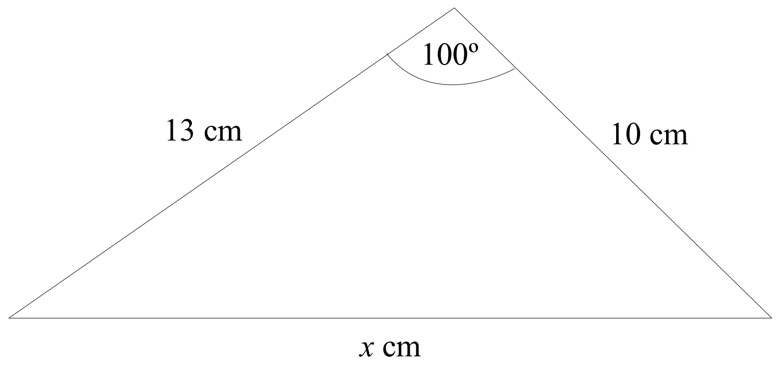
- The marks for each question are shown in brackets

– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

1

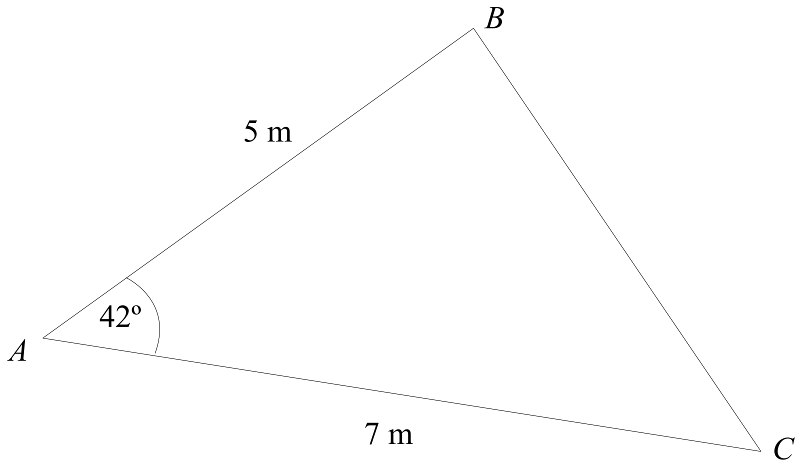


Work out the value of x.
Give your answer to 1 decimal place.

…..........................

(Total for question 1 is 3 marks)

2

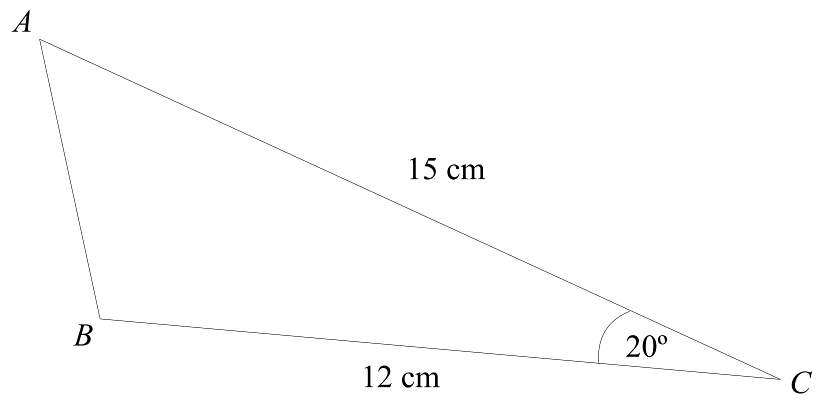


Work out the length of BC.
Give your answer to 3 significant figures.

…..........................m

(Total for question 2 is 3 marks)

3

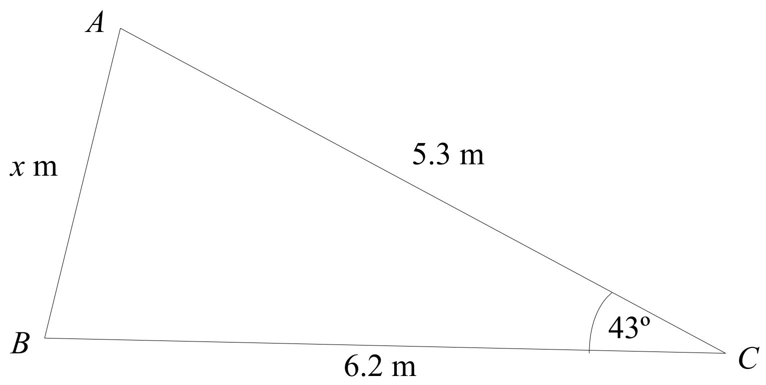


Work out the length of AB.
Give your answer to 1 decimal place.

…..........................cm

(Total for question 3 is 3 marks)

4

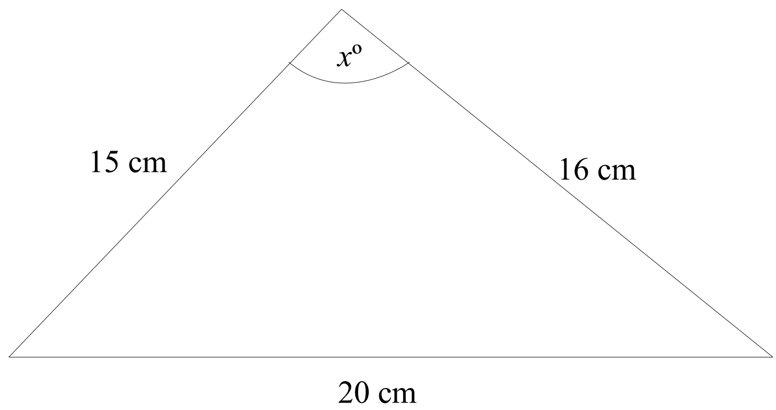


Work out the value of *x*.
Give your answer to 3 significant figures.

…..........................

(Total for question 4 is 3 marks)

5

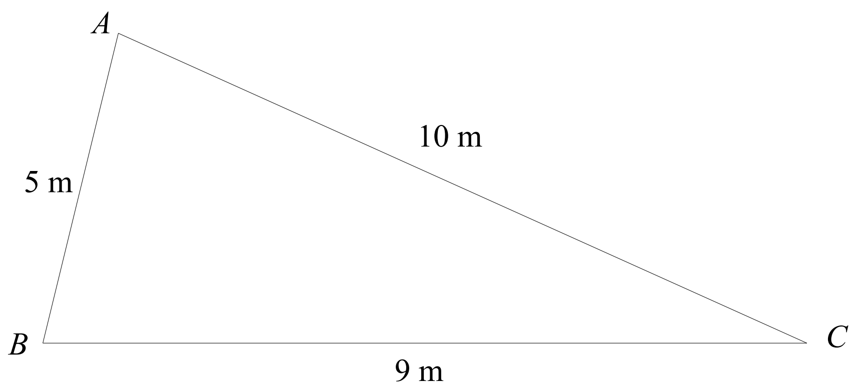


Work out the value of x.
Give your answer to 3 significant figures.

…..........................

(Total for question 5 is 3 marks)

6

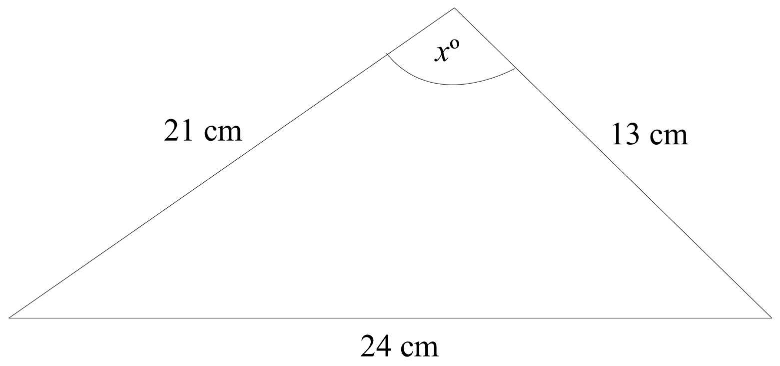


Work out the size of angle ABC
Give your answer to the nearest degree.

…..........................°

(Total for question 6 is 3 marks)

7

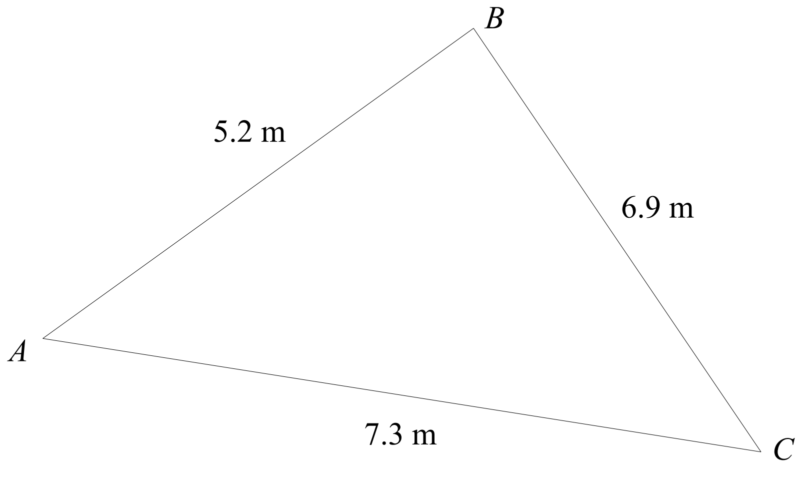


Work out the value of x.
Give your answer to 1 decimal place.

……........................

(Total for question 7 is 3 marks)

8

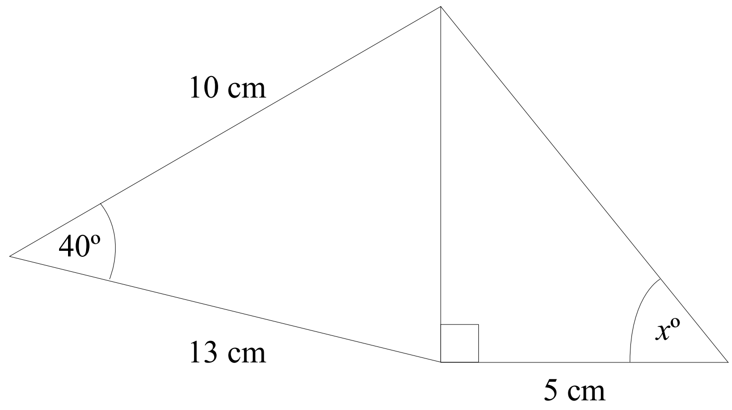


Work out the size of angle BAC.
Give your answer to 3 significant figures.

……........................°

(Total for question 8 is 3 marks)

9

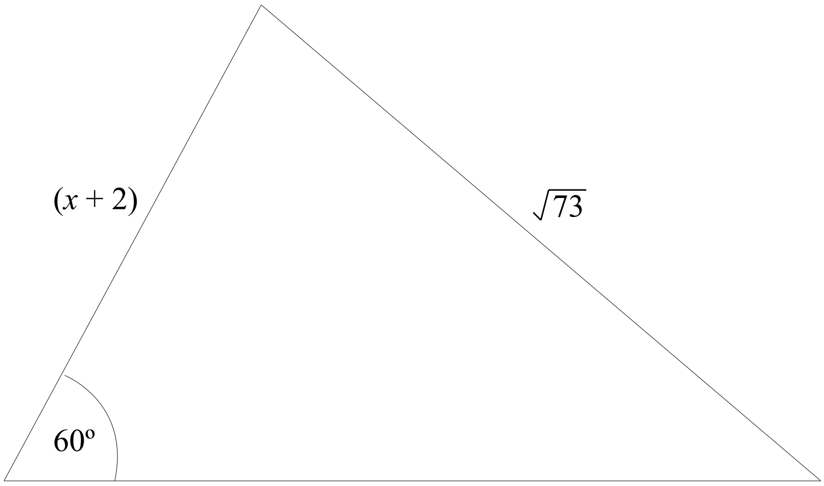


Work out the value of x.
Give your answer to 1 decimal place.

…..........................

(Total for question 9 is 5 marks)

10

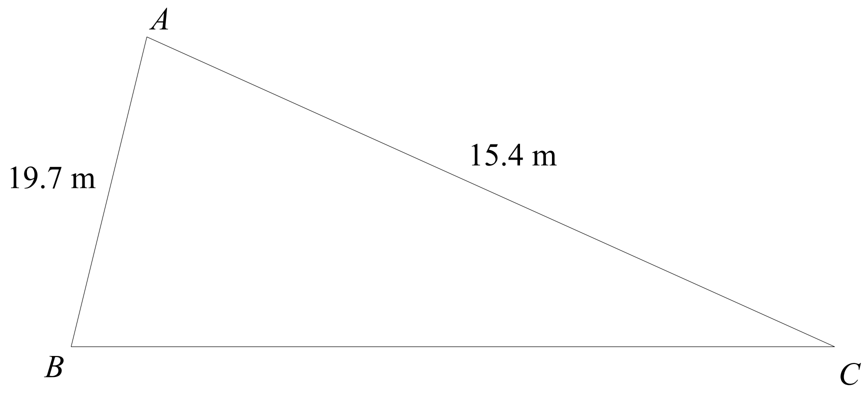


Work out the value of x.

……………………….

(Total for question 10 is 5 marks)

11



The area of the triangle is 100m^2
Calculate the perimeter of triangle *ABC*.
Give your answer to 3 significant figures.

…..........................m

(Total for question 11 is 5 marks)